

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333367-935

Luminaire Tested: **S125DIW-S375D1560U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333367-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIW-S375D1560U935-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5916.9 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

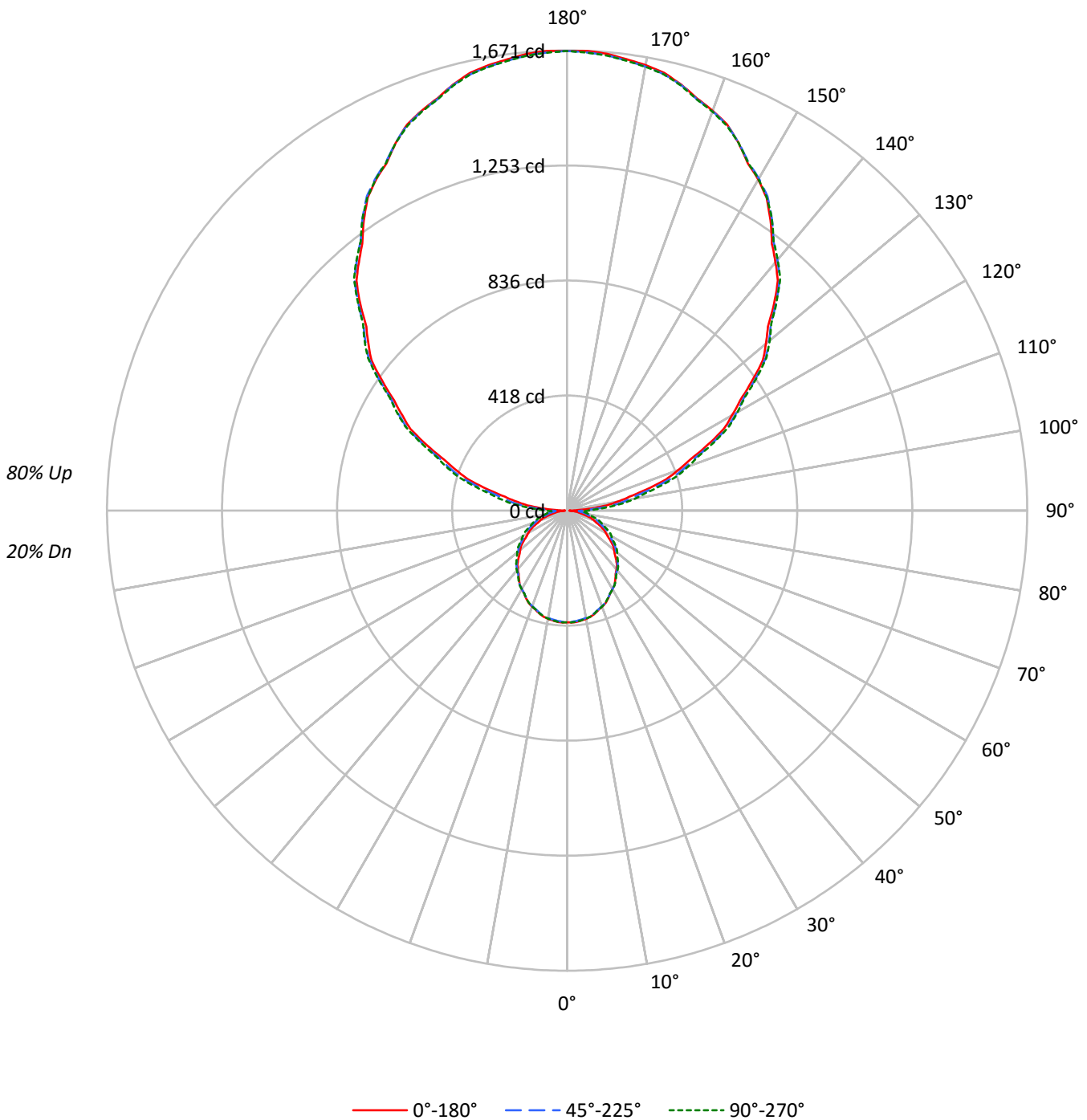
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	91	86	83	79	80	76	73	70	58	56	54	41	39	38	25	24	23	16
2	82	75	69	64	73	67	62	57	50	47	44	35	33	32	22	20	19	13
3	75	66	59	53	66	58	53	48	44	40	37	31	29	27	19	18	16	11
4	69	58	51	45	60	52	45	40	39	35	31	28	25	23	17	15	14	9
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	15	13	12	8
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11	7
7	53	41	34	28	47	37	30	26	28	23	20	20	17	15	12	11	9	6
8	49	37	30	25	43	33	27	22	25	21	18	18	15	13	11	10	8	6
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	7	5
10	42	31	24	19	37	28	22	18	21	17	14	15	12	10	10	8	7	5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2621	2621	2621
5°	2627	2573	2581
10°	2608	2527	2523
15°	2577	2472	2450
20°	2535	2404	2376
25°	2485	2331	2285
30°	2425	2251	2203
35°	2369	2178	2127
40°	2312	2100	2051
45°	2247	2033	1983
50°	2184	1962	1924
55°	2110	1894	1854
60°	2028	1817	1782
65°	1944	1736	1703
70°	1849	1625	1620
75°	1695	1518	1517
80°	1493	1389	1408
85°	1311	1301	1373



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	0.6
10°-20°	108.9	1.8
20°-30°	162.0	2.7
30°-40°	191.9	3.2
40°-50°	198.4	3.4
50°-60°	182.8	3.1
60°-70°	147.8	2.5
70°-80°	99.0	1.7
80°-90°	55.0	0.9
90°-100°	140.6	2.4
100°-110°	351.3	5.9
110°-120°	573.2	9.7
120°-130°	743.7	12.6
130°-140°	827.8	14.0
140°-150°	808.6	13.7
150°-160°	678.6	11.5
160°-170°	451.1	7.6
170°-180°	157.9	2.7
0°-30°	309.4	5.2
0°-40°	501.3	8.5
0°-60°	882.5	14.9
0°-90°	1184.2	20.0
90°-120°	1065.0	18.0
90°-150°	3445.2	58.2
90°-180°	4733.0	80.0
0°-180°	5916.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	406	405	402	405	405	38
15°	388	388	385	387	386	109
25°	352	353	351	352	351	162
35°	305	307	306	308	308	191
45°	251	255	257	260	261	194
55°	193	199	206	210	212	172
65°	133	142	152	157	159	132
75°	73	84	96	104	106	78
85°	22	35	49	57	61	23
90°	8	31	53	69	76	9
95°	90	103	129	146	152	94
105°	300	313	332	347	355	320
115°	562	570	583	588	590	556
125°	818	826	835	839	840	733
135°	1063	1070	1074	1079	1076	819
145°	1287	1292	1296	1298	1296	804
155°	1473	1473	1474	1478	1473	678
165°	1601	1599	1600	1604	1597	451
175°	1665	1660	1660	1666	1658	158
180°	1669	1669	1669	1669	1669	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	406.8	406.7	406.6	406.4	406.3	406.0	405.4	404.9	404.5	404.0	404.5
5°	405.9	405.7	405.5	405.4	405.2	404.8	404.2	403.6	402.9	402.3	403.0
7.5°	402.3	402.3	402.2	402.1	402.0	401.7	401.1	400.4	399.8	399.1	399.8
10°	399.1	399.1	399.1	399.1	399.1	398.7	398.0	397.4	396.7	395.9	396.6
12.5°	394.7	394.8	394.8	394.9	394.9	394.7	394.2	393.6	393.0	392.4	392.9
15°	387.5	387.6	387.7	387.9	388.0	387.6	387.0	386.4	385.8	385.2	385.7
17.5°	378.3	378.5	378.7	378.8	379.0	378.8	378.2	377.5	376.9	376.3	376.8
20°	371.7	371.9	372.0	372.2	372.4	372.1	371.5	370.9	370.3	369.6	370.0
22.5°	364.0	364.4	364.6	365.0	365.3	365.1	364.4	363.7	363.0	362.3	362.7
25°	352.1	352.4	352.7	352.9	353.2	353.1	352.6	352.1	351.5	350.9	351.3
27.5°	339.0	339.3	339.8	340.1	340.5	340.4	339.8	339.2	338.6	338.0	338.2
30°	329.1	329.6	330.1	330.7	331.2	331.2	330.7	330.1	329.6	329.1	329.2
32.5°	320.2	320.6	321.1	321.6	322.0	322.0	321.7	321.2	320.9	320.5	320.6
35°	304.8	305.4	306.1	306.7	307.3	307.5	307.2	306.9	306.7	306.4	306.7
37.5°	289.5	290.0	290.6	291.1	291.7	292.0	291.9	291.8	291.7	291.6	292.0
40°	279.0	279.7	280.3	281.0	281.8	282.1	282.0	281.9	281.8	281.7	282.1
42.5°	267.5	268.4	269.3	270.3	271.1	271.7	271.9	272.1	272.3	272.5	272.9
45°	251.1	252.1	253.0	254.0	254.9	255.7	256.1	256.6	257.0	257.4	258.0
47.5°	234.3	235.2	236.1	237.0	237.9	238.8	239.5	240.2	241.0	241.8	242.7
50°	222.8	223.8	224.8	225.8	226.7	227.7	228.7	229.6	230.6	231.6	232.6
52.5°	210.8	211.9	213.1	214.3	215.5	216.6	217.8	219.0	220.2	221.4	222.5
55°	193.0	194.4	195.8	197.3	198.6	200.1	201.5	202.9	204.3	205.7	206.7
57.5°	174.9	176.5	178.2	179.9	181.7	183.3	184.9	186.6	188.2	189.8	190.9
60°	162.7	164.5	166.3	168.1	169.8	171.6	173.3	175.1	176.9	178.7	179.9
62.5°	150.9	152.7	154.5	156.3	158.1	159.9	161.8	163.7	165.7	167.6	169.0
65°	132.9	134.9	137.0	139.0	141.0	143.1	145.3	147.4	149.5	151.6	152.9
67.5°	115.9	117.9	119.8	121.7	123.7	125.8	127.9	130.1	132.2	134.4	136.0
70°	103.5	105.5	107.5	109.5	111.6	113.7	116.1	118.4	120.6	123.0	124.7
72.5°	91.4	93.5	95.6	97.6	99.8	102.1	104.6	107.1	109.6	112.1	114.0
75°	73.2	75.5	77.8	80.1	82.4	85.0	87.8	90.7	93.5	96.3	98.1
77.5°	55.8	58.5	61.1	63.7	66.4	69.1	71.8	74.6	77.2	80.0	82.0
80°	44.9	47.6	50.3	53.0	55.5	58.4	61.4	64.4	67.4	70.4	72.4
82.5°	35.1	37.9	40.7	43.5	46.2	49.2	52.3	55.4	58.5	61.5	63.4
85°	21.9	24.8	27.7	30.7	33.6	36.6	39.7	42.8	45.9	48.9	50.9
87.5°	12.7	15.9	19.3	22.6	25.8	29.2	32.6	36.0	39.4	42.8	45.1
90°	7.7	12.8	17.9	23.1	28.2	33.3	38.3	43.4	48.4	53.4	56.9
92.5°	37.2	41.4	45.6	49.9	54.1	59.0	64.6	70.1	75.7	81.2	85.1
95°	89.5	92.5	95.3	98.2	101.1	105.5	111.3	117.3	123.1	129.1	133.0
97.5°	144.9	147.2	149.6	151.8	154.1	158.8	165.6	172.5	179.3	186.2	190.0
100°	186.1	188.0	189.9	191.7	193.6	197.9	204.4	210.9	217.6	224.1	228.6
102.5°	230.5	233.4	236.3	239.1	242.0	245.7	250.5	255.1	259.8	264.4	269.1
105°	299.6	302.5	305.4	308.2	311.1	314.7	319.1	323.5	327.9	332.3	335.7
107.5°	376.0	378.7	381.3	384.0	386.6	389.9	393.7	397.6	401.5	405.4	408.0
110°	428.7	431.2	433.7	436.2	438.7	441.6	445.0	448.3	451.7	455.0	457.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	482.8	484.3	485.9	487.5	489.1	491.6	495.2	498.7	502.1	505.7	507.7
115°	562.1	563.9	565.6	567.4	569.1	571.4	574.4	577.2	580.1	583.0	584.3
117.5°	641.6	642.6	643.5	644.5	645.3	647.1	649.9	652.6	655.2	658.0	659.7
120°	691.5	693.2	694.9	696.6	698.4	700.3	702.7	705.0	707.3	709.6	711.2
122.5°	745.2	745.9	746.5	747.2	747.8	749.5	752.2	754.9	757.6	760.3	761.6
125°	818.4	820.0	821.7	823.3	824.9	826.8	828.9	830.9	832.9	835.0	835.9
127.5°	895.9	896.7	897.7	898.5	899.5	900.8	902.6	904.4	906.2	908.0	909.0
130°	942.6	944.0	945.4	946.7	948.0	949.6	951.4	953.3	955.1	956.9	957.9
132.5°	989.0	991.4	993.8	996.1	998.4	1000.1	1000.9	1001.7	1002.5	1003.4	1004.4
135°	1063.0	1064.6	1066.3	1067.9	1069.5	1070.8	1071.8	1072.6	1073.6	1074.4	1075.6
137.5°	1132.5	1134.1	1135.7	1137.3	1138.9	1140.2	1141.2	1142.0	1143.0	1143.9	1145.3
140°	1176.9	1178.3	1179.7	1181.2	1182.7	1183.9	1184.8	1185.8	1186.7	1187.7	1189.2
142.5°	1221.5	1222.7	1223.8	1224.9	1226.1	1227.3	1228.3	1229.4	1230.5	1231.7	1232.9
145°	1287.3	1288.3	1289.3	1290.5	1291.5	1292.4	1293.3	1294.2	1295.0	1295.9	1296.4
147.5°	1347.6	1348.2	1348.8	1349.5	1350.1	1350.8	1351.5	1352.2	1352.9	1353.6	1354.4
150°	1388.1	1387.8	1387.6	1387.2	1387.0	1387.4	1388.5	1389.7	1390.9	1392.1	1392.1
152.5°	1421.3	1421.8	1422.2	1422.5	1423.0	1423.4	1423.9	1424.4	1424.8	1425.3	1426.0
155°	1472.6	1472.6	1472.6	1472.6	1472.6	1472.7	1473.0	1473.3	1473.5	1473.9	1475.0
157.5°	1518.2	1517.6	1517.0	1516.3	1515.7	1515.5	1515.8	1516.1	1516.4	1516.7	1517.9
160°	1545.2	1544.4	1543.5	1542.7	1541.8	1541.5	1541.8	1542.1	1542.4	1542.7	1543.8
162.5°	1569.2	1568.5	1567.9	1567.3	1566.6	1566.3	1566.3	1566.4	1566.5	1566.5	1568.0
165°	1601.1	1600.5	1599.9	1599.4	1598.8	1598.6	1599.0	1599.2	1599.5	1599.8	1600.9
167.5°	1628.1	1626.9	1625.8	1624.6	1623.5	1622.9	1622.9	1622.9	1622.9	1622.9	1624.6
170°	1642.6	1641.5	1640.3	1639.2	1638.1	1637.4	1637.4	1637.4	1637.4	1637.4	1639.2
172.5°	1653.0	1651.9	1650.7	1649.6	1648.4	1647.9	1647.9	1647.9	1647.9	1647.9	1649.6
175°	1664.7	1663.5	1662.4	1661.2	1660.1	1659.5	1659.5	1659.5	1659.5	1659.5	1661.2
177.5°	1670.7	1669.7	1668.9	1667.9	1667.0	1666.4	1666.2	1665.9	1665.7	1665.5	1666.9
180°	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	404.9	405.4	406.0	406.1	406.0	406.0	406.0	405.9
5°	403.7	404.4	405.1	405.4	405.4	405.3	405.2	405.1
7.5°	400.4	401.0	401.6	401.8	401.7	401.7	401.6	401.5
10°	397.2	397.8	398.4	398.6	398.6	398.5	398.4	398.3
12.5°	393.4	393.8	394.3	394.4	394.3	394.0	393.7	393.6
15°	386.2	386.8	387.3	387.4	387.0	386.7	386.3	386.0
17.5°	377.2	377.5	378.0	378.1	377.9	377.6	377.5	377.2
20°	370.2	370.5	370.7	370.8	370.8	370.8	370.8	370.8
22.5°	363.0	363.3	363.7	363.8	363.5	363.3	363.1	362.9
25°	351.6	352.1	352.4	352.3	351.9	351.5	351.0	350.6
27.5°	338.5	338.7	339.0	339.1	338.9	338.7	338.5	338.4
30°	329.4	329.6	329.8	329.8	329.8	329.7	329.6	329.5
32.5°	320.8	321.0	321.2	321.2	321.2	321.1	321.0	320.9
35°	306.9	307.2	307.5	307.5	307.5	307.5	307.5	307.5
37.5°	292.3	292.7	293.0	293.2	293.2	293.1	293.1	293.0
40°	282.4	282.8	283.2	283.4	283.6	283.8	284.0	284.1
42.5°	273.4	273.8	274.2	274.4	274.5	274.5	274.5	274.6
45°	258.7	259.3	259.9	260.3	260.4	260.5	260.5	260.6
47.5°	243.6	244.5	245.4	245.9	246.2	246.3	246.5	246.7
50°	233.5	234.5	235.5	236.1	236.3	236.6	236.9	237.1
52.5°	223.5	224.5	225.6	226.2	226.4	226.6	226.8	227.0
55°	207.7	208.6	209.7	210.3	210.6	210.9	211.4	211.7
57.5°	192.0	193.1	194.2	194.9	195.2	195.4	195.8	196.0
60°	181.3	182.6	184.0	184.8	185.0	185.3	185.5	185.8
62.5°	170.5	171.9	173.4	174.3	174.6	175.0	175.3	175.6
65°	154.3	155.6	156.9	157.7	158.1	158.4	158.9	159.2
67.5°	137.7	139.2	140.9	141.9	142.3	142.8	143.3	143.7
70°	126.3	128.0	129.7	130.8	131.3	131.8	132.3	132.9
72.5°	115.8	117.6	119.4	120.5	120.9	121.3	121.7	122.1
75°	99.9	101.6	103.4	104.4	105.0	105.4	105.8	106.2
77.5°	83.9	85.8	87.7	88.9	89.3	89.6	90.0	90.3
80°	74.3	76.3	78.2	79.4	79.7	80.1	80.4	80.8
82.5°	65.3	67.2	69.1	70.3	70.9	71.5	72.2	72.8
85°	52.9	54.8	56.7	58.0	58.7	59.5	60.2	60.9
87.5°	47.4	49.8	52.1	53.6	54.5	55.3	56.1	56.8
90°	60.4	63.8	67.3	69.8	71.3	72.8	74.2	75.8
92.5°	88.9	92.8	96.7	99.3	100.5	101.8	103.0	104.3
95°	137.0	140.9	144.9	147.5	148.7	149.9	151.1	152.2
97.5°	193.8	197.5	201.3	203.6	204.6	205.5	206.5	207.4
100°	233.1	237.5	241.9	244.7	245.8	246.9	248.1	249.2
102.5°	273.6	278.3	282.8	285.9	287.2	288.5	289.9	291.2
105°	339.2	342.8	346.2	348.7	350.2	351.7	353.2	354.6
107.5°	410.6	413.2	415.9	417.4	417.9	418.4	418.9	419.4
110°	460.1	462.6	465.2	466.7	466.9	467.3	467.6	468.0





TEST NUMBER: P333367-935

CATALOG NUMBER: S125DIW-S375D1560U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	509.7	511.7	513.8	514.8	514.9	515.0	515.1	515.2
115°	585.6	586.9	588.1	588.9	589.2	589.4	589.7	590.0
117.5°	661.4	663.1	664.9	665.5	665.0	664.3	663.8	663.2
120°	712.6	714.1	715.7	716.1	715.5	714.9	714.2	713.6
122.5°	762.7	763.9	765.1	765.5	765.2	764.7	764.3	764.0
125°	836.7	837.5	838.4	838.9	839.0	839.1	839.3	839.5
127.5°	910.0	911.0	912.1	912.6	912.5	912.4	912.3	912.3
130°	958.8	959.8	960.7	961.1	961.0	960.8	960.7	960.5
132.5°	1005.3	1006.3	1007.2	1007.5	1007.0	1006.6	1006.2	1005.7
135°	1076.8	1077.9	1079.1	1079.3	1078.6	1077.9	1077.1	1076.4
137.5°	1146.7	1148.1	1149.5	1149.6	1148.6	1147.5	1146.3	1145.3
140°	1190.8	1192.3	1193.9	1194.1	1193.0	1191.9	1190.8	1189.7
142.5°	1234.1	1235.2	1236.4	1236.4	1235.4	1234.2	1233.2	1232.1
145°	1296.8	1297.3	1297.7	1297.7	1297.2	1296.7	1296.1	1295.6
147.5°	1355.2	1356.1	1356.9	1356.4	1354.6	1352.8	1351.0	1349.2
150°	1392.1	1392.1	1392.1	1391.8	1391.3	1390.8	1390.3	1389.8
152.5°	1426.7	1427.4	1428.1	1427.9	1426.8	1425.8	1424.8	1423.7
155°	1476.1	1477.3	1478.4	1478.3	1476.9	1475.4	1473.9	1472.6
157.5°	1519.0	1520.2	1521.3	1521.0	1519.0	1517.1	1515.2	1513.3
160°	1545.0	1546.1	1547.3	1547.1	1545.7	1544.2	1542.8	1541.4
162.5°	1569.3	1570.7	1572.1	1571.9	1570.3	1568.6	1566.9	1565.2
165°	1602.1	1603.3	1604.4	1604.1	1602.4	1600.7	1599.0	1597.2
167.5°	1626.3	1628.1	1629.8	1629.8	1628.0	1626.3	1624.4	1622.6
170°	1640.9	1642.6	1644.3	1644.3	1642.2	1640.2	1638.1	1636.2
172.5°	1651.3	1653.0	1654.8	1654.8	1652.9	1651.1	1649.3	1647.6
175°	1663.0	1664.7	1666.5	1666.3	1664.3	1662.2	1660.3	1658.2
177.5°	1668.3	1669.7	1671.0	1670.9	1669.3	1667.7	1666.0	1664.5
180°	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6

(END OF REPORT)